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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/659,516	09/11/2003	Robert L. Way	D-7438	3615

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EXAMINER	
SALDANO, LISA M	

ART UNIT	PAPER NUMBER
3673	

DATE MAILED: 08/11/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/659,516	WAY, ROBERT L.	
	Examiner	Art Unit	
	Lisa M. Saldano	3673	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11 September 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *11 September 2003* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *9/11/2003*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawings are objected to because the element numbers appear to be pointing to incorrect elements. For example, in Figure 1, the element number 21 does not appear to be pointing to the cylinder. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the first plurality of pulleys attached

between said piston and said cylinder, as recited in claim 17, must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

3. The disclosure is objected to because of the following informalities: the element number used with element numbers does not appear to match the figures or does not even appear in the referenced figure according to the specification. For example, page 6 of the specification recites

a hydraulic system 16, when referring to Fig.2. However, Fig.2 does not show element number 16. Please correct all such occurrences in the specification.

Appropriate correction is required.

Claim Objections

4. Claims 1, 4, 10, 16, 1719 and 20 are objected to because of the following informalities:

Regarding claims 1 and 10, the applicant recites limitations directed to "such dock." It is not clear whether the applicant intends to refer back to the preamble for positive recitation of the dock. Furthermore, "such" is not an acceptable article for use in claim language. The examiner suggests that the applicant replace the word "such" with either "said" or "the" if he/she wants to claim the dock.

Regarding claim 4, line 2, the applicant recites the limitation of "guide members mounted between said cradle..." The applicant fails to state the other component of the invention that the guide member is mounted between.

Regarding claim 10, line 8, the limitation of "said movable member" has not been mentioned in prior claim language from which this limitation depends. Please clarify this phrase to provide proper basis for this limitation.

Regarding claim 16, line 1, the preamble "The boat lift" does not match the preceding claims' preambles from which claim 16 depends, namely claim 13.

Regarding claim 17, line 6, the applicant recites limitations directed to "a first plurality of pulleys attached between said piston and said cylinder." The drawings to do not illustrate a first plurality of pulleys attached between said piston and said cylinder. Please clarify.

Regarding claim 17, lines 6 AND 16, the applicant recites limitations to "said piston." The applicant should insert "arm" after the word "piston" because prior claim language provides basis for limitations directed to a "piston arm."

Regarding claims 19 and 20, line 1, the preamble "The boat lift" does not match the preceding claims' preambles from which claims 19 and 20 depend, namely claim 12.

Regarding claim 19, lines 1, the applicant recites limitations directed to "said one end" and "said pair of cables." This prior claim language does not provide basis for these limitations. It appears that the claim should recite "one end..." and "cable means."

Appropriate correction is required.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 1,3-6 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Seal (4,641,996) in view of Williamson (4,678,366).

Seal discloses an assembly comprising a plurality of laterally spaced rails 10, 12, and 14 that are mounted to suitable supports such as pilings 24 (see column 2, lines 8-15 and Figs. 1&2). Taken in combination, the rails mounted to the pilings 24 comprise overall larger pilings with lower ends mounted to the floor of a water body and upper ends extending upwardly adjacent to yet another support structures such as seawall 22 or some other foundation structure (see column 2, lines 8-15). Seal further discloses a boat cradle comprising horizontal extensions 56,58,60, chock brackets 64,66 and chocks 68,70 (see Fig.3). Seal further discloses lifting means for vertically moving the cradle with winch housings 80,82,84 attached to a seawall 22 or some other foundation structure, wherein the housings containing winches that are movable members (see Fig.3 and column 2, lines 49-65). The lifting means also comprise cable means 86,88 mounted to each combination piling between the winches and the boat cradle. The winch is movable between at least a first and second position for lifting and lowering the cradle. NOTE: Rails 10, 12, and 14, which comprise the upper component of the combination pilings are disclosed to preferably be I-Beams or H-Beams (see column 2, lines 24-26).

Regarding claim 3, Seal discloses pulleys 94,96 on the combination pilings for mounting cable means 88,86 to the combinations pilings.

Regarding claims 4 and 5, Seal discloses guide members comprising boat carriers 28,30,32 and yokes 34,36,38 wherein the boat carriers are slidingly mounted to the rails of the combination pilings. The boat carriers are rigidly mounted to horizontal extensions 56,58,60 of the cradle.

Regarding claim 6, Seal discloses wheels or rollers 52,54 mounted against the rail portions of the combination pilings (see Fig.1).

Regarding claim 9, Seal discloses an incline from the vertical direction of the rail portion of the combination piling.

However, Seal fails to explicitly disclose that one of the other foundation structures may include a dock.

Williamson discloses a boatlift comprising a vertical H-Beam shaft that is driven into the floor 100 of a body of water 102, such as piles (see column 3, lines 7-15). Williamson discloses the H-Beam shaft connected to a boat cradle and also connected to a pier 200, which is a dock. NOTE: the definition of a dock was taken from Merriam-Webster's Collegiate Dictionary, 10th Edition wherein it states "a place (as a wharf or platform) for the loading and unloading of materials."

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the boat lift of seal to be mounted upon a platform or dock, as suggested by Williamson because Seal clearly states that the winch housings may be attached to some other foundation; a platform is another foundation that is commonly found in environments where boat lifts are used, as evidenced by Williamson.

Furthermore, regarding claim 9, it would have been obvious to one of ordinary skill in the art to provide a piling whereby the entire piling is inclined from its lower portion to the upper portion in the direction of the dock toward the top because, as Seal shows, this provide a greater measure of clearance for the boat to fit within the cradle portion.

7. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Seal in view of Williamson, as applied to claim 1 above, in further view of Penick, Jr. et al (5,090,841).

Seal and Williamson disclose the inventions as described above. Specifically, Seal uses a winch as a movable member to move cable means to lift and lower the boatlift cradle.

However, Seal and Williamson fail to disclose hydraulic means to move the cable means and subsequently lift and lower the boatlift.

Penick, Jr. et al disclose a boatlift comprising four upright members 12,13,14,16 wherein cable means 26,29 are moved by a hydraulically powered piston rod 71 housed in cylinder 66 to move pulley 27 resulting in a chain of pulley motion that lifts and lowers carriage or cradle 36 (see Figs. 1& 2 and column 2).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the boat lift of Seal to use a hydraulically powered piston rod and cylinder to move cable means for ultimately lifting and lowering the cradle, as taught by Penick, Jr et al, because the winch and pistons are functional equivalents to transfer force to the cables mean such that the cables move in a manner to lift and lower the cradle.

8. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Seal in view of Williamson, as applied to claim 5 above, in further view of Rockwood (5,245,940).

Seal and Williamson disclose the inventions as described above. Specifically, Seal discloses a boat cradle comprising horizontal extensions 56,58,60, chock brackets 64,66 and chocks 68,70 (see Fig.3). The horizontal extensions 56,58,60 serve as bunk rails. Seal also discloses guide members comprising boat carriers 28,30,32 and yokes 34,36,38 wherein the boat

carriers are slidingly mounted to the rails of the combination pilings. The boat carriers are rigidly mounted to horizontal extensions 56,58,60 of the cradle.

However, Seal and Williamson fail to explicitly disclose elongated bunks and bunk rails that are perpendicular to guide members.

Rockwood discloses a load lifting device comprising a vertical post driven in a water body's bottom (see column 2, lines 10-25), with a boat cradle comprising tubular members or bunk rails 50,52 perpendicularly mounted to guide members (see Fig.1). Rockwood also discloses elongated bunks 54,56 (see column 3, lines 10-15) extending traverse to the bunk rails 50,52.

It would have been obvious to one of ordinary skill in the art to modify the boat lift of Seal to incorporate elongated bunks and bunk rails that are perpendicular to guide members, as taught by Rockwood, since Rockwood teaches that such structure is well known in this area of endeavor. The cradles of Seal and Rockwood both perform the same functions of securing a boat to a lift, albeit the designs to provide those functions have been done with slight variations. Also, the applicant has failed to disclose criticality of the claimed structure.

9. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Seal in view of Williamson in further view of Rockwood, as applied to claim 7 above, in further view of Keesling (5,522,671).

Seal, Williamson and Rockwood disclose the inventions as described above. Specifically, Seal discloses a boat cradle comprising horizontal extensions (56,58,60), chock brackets 64,66 and chocks 68,70 (see Fig.3). The horizontal extensions 56,58,60 serve as bunk rails. Seal also

discloses guide members comprising boat carriers 28,30,32 and yokes 34,36,38 wherein the boat carriers are slidingly mounted to the rails of the combination pilings. Note that Seal discloses that three rails may be needed for larger boats (see column 2, lines 18-20).

However, Seal, Williamson and Rockwood fail to disclose a second pair of guide members and pilings opposite the first pair.

Keesling discloses a boatlift with four concrete piles 18, a cradle (19,20), hydraulic lifting means 26, cables 14 and pulleys 11 for lifting and lowering a boat.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the boat lift of Seal to include a second pair of guide members and pilings opposite the first pair, as taught by Keesling, because is simply provides redundancy and more structural reliability to the lifting structure. The provision of four allows the boatlift to accommodate larger boats by virtue of greater load capacity.

10. Claims 10-15 and 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Seal (4,641,996) in view of Williamson (4,678,366) and Penick, Jr. et al (5,090,841).

Seal discloses the invention as described above. Specifically, Seal uses a winch as a movable member to move cable means to lift and lower the boatlift cradle. The winch is mounted to a foundation, such as a seawall, via a mast (16,18,20).

Regarding claim 11, Seal discloses pulleys 94,96 on the combination pilings for mounting cable means 88,86 to the combinations pilings.

Regarding claims 12, 13, 18 and 19, Seal discloses guide members comprising boat carriers 28,30,32 and yokes 34,36,38 wherein the boat carriers are slidingly mounted to the rails

of the combination pilings. The boat carriers are rigidly mounted to horizontal extensions 56,58,60 of the cradle.

Regarding claim 14, Seal discloses wheels or rollers 52,54 mounted against the rail portions of the combination pilings (see Fig.1).

Regarding claim 15, Seal discloses an incline from the vertical direction of the rail portion of the combination piling.

However, Seal fails to disclose hydraulic means to move the cable means and subsequently lift and lower the boatlift. Seal also fails to explicitly disclose that one of the other foundation structures may include a dock.

Williamson discloses a boatlift comprising a vertical H-Beam shaft that is driven into the floor 100 of a body of water 102, such as piles (see column 3, lines 7-15). Williamson discloses the H-Beam shaft connected to a boat cradle and also connected to a pier 200, which is a dock. NOTE: the definition of a dock was taken from Merriam-Webster's Collegiate Dictionary, 10th Edition wherein it states "a place (as a wharf or platform) for the loading and unloading of materials."

Penick, Jr. et al disclose a boatlift comprising four upright members 12,13,14,16 wherein cable means 26,29 are moved by a hydraulically powered and extensible piston rod 71 housed in stationary cylinder 66 to move pulley 27 resulting in a chain of pulley motion that lifts and lowers carriage or cradle 36 (see Figs. 1& 2 and column 2). Penick, Jr. et al disclose that the cables are first directed in a horizontal motion and then in a vertical motion to lift and lower the cradle (see Figs.1&2).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the boat lift of seal to be mounted upon a platform or dock, as suggested by Williamson because Seal clearly states that the winch housings may be attached to some other foundation; a platform is another foundation that is commonly found in environments where boat lifts are used, as evidenced by Williamson. Furthermore, it would have been obvious to one of ordinary skill in the art to provide a piling whereby the entire piling is inclined from its lower portion to the upper portion in the direction of the dock toward the top because, as Seal shows, this provide a greater measure of clearance for the boat to fit within the cradle portion.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the boat lift of Seal to use a hydraulically powered piston rod and cylinder to move cable means for ultimately lifting and lowering the cradle, as taught by Penick, Jr et al, because the winch and pistons are functional equivalents to transfer force to the cables mean such that the cables move in a manner to lift and lower the cradle.

11. Claims 16 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Seal in view of Williamson and Penick Jr, et al as applied to claim 13 and 19 above, in further view of Rockwood (5,245,940).

Seal, Williamson and Penick, Jr. et al disclose the inventions as described above. Specifically, Seal discloses a boat cradle comprising horizontal extensions 56,58,60, chock brackets 64,66 and chocks 68,70 (see Fig.3). The horizontal extensions 56,58,60 serve as bunk rails. Seal also discloses guide members comprising boat carriers 28,30,32 and yokes 34,36,38

wherein the boat carriers are slidingly mounted to the rails of the combination pilings. The boat carriers are rigidly mounted to horizontal extensions 56,58,60 of the cradle.

However, Seal, Williamson and Penick, Jr. et al fail to explicitly disclose elongated bunks and bunk rails that are perpendicular to guide members.

Rockwood discloses a load lifting device comprising a vertical post driven in a water body's bottom (see column 2, lines 10-25), with a boat cradle comprising tubular members or bunk rails 50,52 perpendicularly mounted to guide members (see Fig.1). Rockwood also discloses elongated bunks 54,56 (see column 3, lines 10-15) extending traverse to the bunk rails 50,52.

It would have been obvious to one of ordinary skill in the art to modify the boat lift of Seal to incorporate elongated bunks and bunk rails that are perpendicular to guide members, as taught by Rockwood, since Rockwood teaches that such structure is well known in this area of endeavor. The cradles of Seal and Rockwood both perform the same functions of securing a boat to a lift, albeit the designs to provide those functions have been done with slight variations. Also, the applicant has failed to disclose criticality of the claimed structure.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Thomas (4,686,920), Godbersen (5,427,471), and Stokoe et al (5,314,263) disclose features that are pertinent to the present application.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lisa M. Saldano whose telephone number is 703-605-1167. The examiner can normally be reached on Monday-Friday, 8:30am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather C. Shackelford can be reached on 703-308-2978. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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